

# A Model for Random Student Drug Testing

Judith A. Nelson, Nancy L. Rose, and Danielle Lutz

**Abstract:** *The purpose of this case study was to examine random student drug testing in one school district relevant to: (a) the perceptions of students participating in competitive extracurricular activities regarding drug use and abuse; (b) the attitudes and perceptions of parents, school staff, and community members regarding student drug involvement; (c) the perceptions of high school parents regarding random student drug testing and its impact on drug and alcohol use; and (d) the patterns and analyses of data collected regarding the use of random student drug testing as a preventative tool. Both quantitative and qualitative data were collected for inclusion in an analysis of the study in order to strengthen the results. The findings indicated that during a period of grant funding, the use of drugs decreased during a program of random student drug testing in the public school district studied. Furthermore, the random student drug-testing program initiated discussion among parents, school staff, community members, and students regarding drug use, community resources, and the importance of early intervention.*

## Introduction

The United States has historically suffered from some of the highest rates of drug abuse in the world (Office of National Drug Control [ONDC], 2008). Most Americans agree that young people should not be exposed or involved in the unhealthy and dangerous behavior of using or abusing illegal drugs. School administrators are challenged to create learning environments in which children are free to study and grow without the pressure of drug and violence exposure (Russell, Jennings, & Classey, 2005). This foundational principle confronts our schools and communities despite the implementation of extensive prevention and intervention strategies.

Substance use and abuse problems take a terrible toll on the productivity of the nation's youth and further undermine the role of the school as a place of learning (Brady, 2007). Substance abuse is recognized as a major health issue in the education field due to the increases in student dropout rates, truancy, misconduct, fighting, and general lack of concern for others. A student's social/emotional development and academic learning is the primary goal of educators. When teachers and administrators are faced with intervening in student drug use and abuse, that goal is diverted to another primary focus of substance abuse intervention.

## A Review of the Literature Educational Implications of Substance Abuse Among Students

The National Center on Addiction and Substance Abuse (CASA) (2005) reported that substance abuse adds at least \$41 billion dollars each year to the costs of elementary and secondary education

in terms of special education, truancy, dropouts, counseling, teacher turnover, property damage, injury, and other costs. It is difficult to fully understand the spread of drug use throughout a school but, much like disease, it spreads by student-to-student contact, multiplying more rapidly as more and more students are affected.

The Office of National Drug Control Policy (ONDCP) (2002) reported that with the advances in medical technology, researchers are now able to capture pictures of the human brain under the influence of drugs. Many images clearly show that pleasurable sensations produced by some drugs are due to actual physical changes in the brain. Due to the developing nature of the adolescent brain, it is particularly susceptible to these sensations and changes. Many of these changes are long lasting, and some are irreversible. Introducing chemical changes in the brain through the use of illegal drugs can therefore have far more serious adverse effects on adolescents than adults.

Results of the National Center on Addiction and Substance Abuse at Columbia University's 12th annual *National Survey of American Attitudes on Substance Abuse* (2007) were unprecedented. Joseph A. Califano, Jr., Chairman and President of CASA, stated that the survey revealed an infestation of drugs in our nation's middle and high schools. Drug use can quickly turn to dependence and addiction, trapping users in a vicious cycle that ruins lives and destroys communities. Students who use drugs or alcohol are statistically more likely to drop out of school than their peers who do not (ONDCP, 2002). Dropouts, in turn, are more likely to be unemployed, to depend on the welfare system, and to commit crimes.

## **A Precursor to Random Student Drug Testing**

The U.S. Department of Defense began drug testing its military personnel more than 25 years ago, and during that time, the rate of positive tests among service members has fallen from 30% to less than 2% (DuPont & Graves, 2005). In addition, in 1988 the United States Department of Health and Human Services (DHHS) set up the mandatory guidelines for federal workplace drug testing programs. The DHHS established the scientific and technical guidelines for drug testing programs and standards for certification of laboratories engaged in urine drug testing for federal agencies under the authority of edition 503 of Pub. L. 100-71, 5 (USDHHS, 1988). This standard for drug testing in the workplace was revised several times which led to the establishment of standards for drug testing students in the public school setting (ONDCP, 2008).

During 1999, the National Institute on Drug Abuse funded the Student Athlete Testing Using Random Notification (SATURN) Project (Goldberg et al., 2003). This investigation studied the effects of a program similar to the U.S. Olympic Committee's No Advanced Notice Intervention, which is currently used by the U.S. Anti-Doping Agency (United States Olympic Committee, 1996). The potential value of Random Student Drug Testing (RSDT) programs to deter adolescents from using drugs is supported by this National Institute on Drug Abuse (NIDA) study of student athletes. The results of the SATURN Project indicated that of the 25% of students surveyed who used marijuana and of the 60% who used alcohol, only 9% would continue to use drugs and 12% would continue to use alcohol if mandatory drug testing were present in their schools (Goldberg, Elliott, Moe, Kuehl, & Clarke, 1999).

If the threat of drug testing can reduce initiation or curtail alcohol and other drug use, then the policy may be a viable option to supplement drug prevention efforts. The SATURN study was designed to determine whether a nonpunitive, mandatory, random, suspicionless drug testing policy is an effective deterrent to drug and alcohol use among school-aged athletes (Goldberg, et al., 2003). RSDT may help create a deterrent to drug use among adolescents and allow for a better learning environment for all students. RSDT may allow for healthy physical, social, and emotional development and an escape from the devastation of the cycle of dependence or addiction. As a new tool in preventing and intervening in drug-related issues, RSDT may further improve the safety of all students, parents, school staff, and benefit the entire community (DuPont, & Brady, 2005).

## **Random Student Drug Testing as an Answer**

John P. Walters, Director of the Office of National Drug Control Policy, reported that the United States Supreme Court broadened the authority of public schools to test students for illegal drugs (Board of Education of Independent School District No. 92 of Pottawatomie County et al. vs. Earls et al., 2002). In June 2002, the United States Supreme Court ruled to allow RSDT for all middle and high school students participating in competitive extracurricular activities. In schools, RSDT programs are designed to (a) deter students from initiating drug use, (b) help identify students who have just begun to use drugs before dependency begins, and (c) help identify students with dependency so that they may be referred to appropriate treatment (ONDCP, 2002).

The current generation of student drug testing programs in the United States share several important features including: (a) using random student drug testing as the fairest way of identifying the students to be tested; (b) ensuring confidentiality of drug test results; (c) distinguishing prescribed medicines from illegal drug use; (d) linking positive tests to parental involvement; and (e) providing both individual evaluation and a variety of services including, when needed, drug abuse treatment. The goal of these programs is not only to retain students in school but to help them overcome their drug use problems (Dupont, Campbell, & Mazza, 2002).

Over recent years, numerous preventive strategies have been explored as possible options to address drug use by young people. In 2005, Robert DuPont, M.D., founder of the NIDA, and Harvey Graves, Ph.D., collaborated with the White House ONDCP to establish policies, priorities, and objectives which examine the use of RSDT as a drug reduction tool. RSDT is not a stand-alone prevention program. DuPont, Griffin, Siskin, Shiraki, & Katze (1995) reported that a good RSDT program will not end the problem of adolescent drug use in schools just as drug testing has not ended drug use in the U.S. military where it has been used since the early 1980s.

A comprehensive drug prevention program which includes RSDT has proven to be an effective deterrent to drug use and has had a positive impact on the school environment and ultimately student learning (Rose, 2009). Just as parents and students expect school to offer protection from violence, racism, and other forms of abuse, so they also have the right to expect a learning environment free from the influence of illegal drugs (ONDCP, 2002). A RSDT program that is carefully planned and implemented has the potential to inhibit many students from risk-taking drug experimentation that may lead to regular use, abuse, and dependency. Data that supports the use of RSDT is not abundant in the literature. The purpose of this case study was to examine one school district's experience with RSDT and the impact RSDT had on students, school staff, and the community. The results of the data collection are encouraging and are reported here, and we hope to add to the knowledge base on RSDT for future programmatic planning.

## **A Model Random Student Drug-Testing Program Preparing for Random Student Drug Testing**

During a three-year period beginning in 2005, one large suburban school district in the southwestern United States received a substantial grant from the Department of Education to conduct random student drug testing (RSDT) and track the results of the drug-testing program. The district saw the grant as an opportunity to develop policies and procedures that would decrease the numbers of students involved in substance use and abuse and hopefully lead to increased student academic success. Careful and thoughtful planning was initiated before the implementation of the actual drug testing. Approval of the grant award was secured in 2005 including approval to accept grant processes for implementation of the grant activities by the Board of Trustees. Additionally, the creation of a student drug-testing district policy by the Board of Trustees was approved. A complete and formal Institutional Review Board was finalized, specifications regarding



testing protocol were concluded, and the drug-testing vendor was contracted.

In addition to the adoption of Board policy, parent meetings were offered throughout the district to provide information regarding random student drug testing, processes, and procedures. Administrators received training regarding confidentiality issues, escorting of students to the testing areas, and how to handle special situations such as students who refused to be tested. Students also received information regarding RSDT in formal and informal meetings. All of these activities were instrumental in the smooth transition into the actual drug testing itself and to the success of the Project.

## Project Procedures for Random Student Drug Testing

The Board of Trustees of the district adopted a policy that required written consent from parents and students to participate in school-sponsored, competitive, extracurricular activities. This eligibility requirement placed a student in a districtwide RSDT pool of participants, and students were then chosen for testing by a computer-generated random selection process. The proposed student drug panel included the following: (a) Amphetamines/Methamphetamines (stimulant: speed, diet pills, uppers); (b) Cocaine metabolites (central nervous system stimulant: crack, crystal); (c) Opiates (pain killer: Oxycodone, Darvocet, Vicodin); (d) Cannabinoid (depressant: Marijuana); (e) Barbiturates (depressant; downers, sleeping pills: Amytal, Butisol); (f) Benzodiazepines (anti-anxiety medication: Valium, Xanax, Librium); (g) Ethanol (depressant: Alcohol); (h) Hallucinogens (perception alteration: shrooms, mescline, acid, LSD); (i) Phencyclidine (anesthetic, hallucinogen: PCP, angel dust); and (j) Methylenedioxymethamphetamine (MDMA, Ecstasy).

The testing was conducted through scientific means using approved practices and procedures and was accomplished by urinalysis. Student privacy was protected in accordance with all applicable laws. The drug-testing vendor provided a Medical Review Officer (MRO; MD certified toxicologist) for interpreting and verifying test results. When a student's test result indicated the presence of a prohibited substance, the parent or guardian was contacted by an MRO. The MRO conferred with a parent or guardian to determine if there was a medical explanation for the positive test result. When the medical explanation was verified by the MRO, the test result was reported as negative. However, without verification by the MRO, a confirmed positive test result was reported to the designated school official. Students who tested positive were able to request a confirmation test. Other than the confirmatory procedure above, there was no other appeal of a positive test result.

When the test results indicated the presence of prohibited drugs, banned substances, or adulteration, the student was suspended from participation in any school-sponsored, competitive, extracurricular performances, and competitions. Consequences were as follows: (a) first offense: 3 weeks; (b) second offense: 6 weeks; and (c) third offense: one semester. During the period of suspension, the student involved was required to practice, but not permitted to participate in competitions or performances. The parent and student were expected to attend an appointment with a Licensed Chemical Dependency Counselor (LCDC) for an assessment. Resources were available for

families who could not access this type of intervention. If the student refused to follow any procedures during suspension, he or she was denied the privilege of participation in school-sponsored, competitive, and extracurricular activities for the remainder of the school year.

## Method Design

This research project was a case study in which the researchers explored a program in-depth using a variety of data collection procedures over a sustained period of time (Stake, 1995). The intent of the study was to examine the processes, activities, and events of the RSDT Project in one school district (Creswell, 2003). The RSDT Project was funded by the United States Department of Education and lasted for a period of three years. The data collected included (a) student self-reports on drug use, (b) drug testing results, (c) focus group responses, (d) results of a teacher survey, and (e) results of surveys completed by parents and community members.

## Research Questions

The following research questions guided the research study.

*Research Question 1.* What are the present self-reporting results of high school students regarding drug and alcohol use? What is the change in the self-reporting results from the spring semester of 2006 to the spring semester of 2008?

*Research Question 2.* What are the attitudes and perceptions of parents, school staff, and community members in the district regarding youth involvement with drug and alcohol use?

*Research Question 3.* What are the attitudes and perceptions of parents of high school students in the district regarding random student drug testing and its impact on student drug and alcohol use?

*Research Question 4.* What patterns and analyses can be made using the data collected regarding student drug infractions as reported by the state and the district?

*Research Question 5.* What patterns and analyses can be made using the data collected regarding the random student drug-testing results?

*Research Question 6.* What are the strengths and areas of concern regarding the Random Student Drug-Testing Project in the district?

Multiple data sources were used to answer each question, and secondary data sources were combined to increase the accuracy of interpretations. The methods for data collection were selected to allow for minimal disruption to student, classroom, and school staff. The following methods and instruments were used to specifically answer each research question.

## Participants

A purposeful sample was selected to gather more in-depth information for the research study. Selecting a sample of similar cases so that the particular group represented can be studied in-depth is the rationale behind the use of a purposeful sample (Gall, Borg, & Gall, 1996). The value of the research lies in the particular characteristics that the samples share. The district sample was homogeneous based on the age group studied (grades 9 – 12), and all participants in the sample received the same type of drug testing (urinalysis). Students

participating in the drug testing were actively involved in school-sponsored, competitive, extracurricular activities. In addition, each high school campus studied reported similar needs for drug prevention and had utilized the same student self-reporting survey in which to corroborate the findings.

The survey sample included not only the students in extracurricular activities who were in the testing pool, but also randomly selected students from the entire high school population in the district. Inclusion of this sample allowed the researchers to glean information about student drug use from a larger pool of participants. The self-reporting survey reflected the perceptions of students regarding their own substance use and that of their peers. A random sample of students in grades 9 through 12 were surveyed in March 2006 (N = 2641), February 2007 (N = 2769), and February 2008 (N = 2690).

Quantitative and qualitative data were also collected from parents of high school students who were and were not in the RSDT sample. These data were collected from parents who were participants in town hall meetings, focus groups, and interviews. Data were also collected from teachers and administrators who worked at the eight high schools involved in the Project and who chose to respond to a survey. The teachers and administrators participating in the survey had varying degrees of interaction with the RSDT Project.

## Data Collection

Each research question was addressed using the following data collection procedures.

*Question 1: Student self-reporting.* The district chose a reliable and valid instrument to determine students' attitudes and perceptions of drug and alcohol use. The survey has been used in school districts since 1988. The survey is partially supported by the state's Commission on Alcohol and Drug Abuse with the remaining costs covered by participating school districts. It is conducted by the Public Policy Research Institute at a local university. This survey provides school districts with an accurate estimate of the extent and nature of substance use at the local level. It produces data to replace speculative sensational information (Public Policy Research Institute, 2006).

Administered over an extended period of time, the survey is an effective tool to evaluate the impact of special substance abuse prevention and education programs such as RSDT. The survey was designed to be responsive to questions of specific interest to educators, policymakers, parents, and community groups. Salient results of the survey from administration in 2006 and 2008 were compared for the purpose of identifying changes in students' perceptions of their own drug use and drug use among their peers since the inception of the RSDT Project.

*Questions 2 and 3: Parent, school staff, and community attitudes and perceptions.* Prior to the beginning of student drug testing and before each new school year, district personnel conducted communitywide informational meetings regarding the RSDT Project. The meetings were well publicized and gave parents, school staff, and community members an opportunity to provide feedback regarding the RSDT Project and to get all of the facts about the drug-testing procedures. At these meetings, parents were invited to respond to several questions in writing. The research team transcribed the information and analyzed the data.

At the 2007 Safe and Drug Free Schools (SDFS) District Board Meeting, participants were invited to respond to a ten-question survey regarding the RSDT Project and to rank order their budget priorities of the SDFS Department for 2007-2008. In addition, one of the researchers conducted a focus group consisting of students and parents. In May 2008, high school teachers and administrators were emailed a survey regarding the RSDT Project. The researchers wrote the survey questions based on the most current thinking in survey research (Dillman, 2007), and asked research faculty at a local university to read and edit the questions for understanding.

*Question 4: Patterns and Analyses for DAEP Placements and Dropout Rates.* Districts are required to report and categorize all student infractions through the state's Public Education Information Management System (PEIMS). These reports for 2004-2005, 2005-2006, 2006-2007, and 2007-2008 delineated drug and alcohol offenses that resulted in Disciplinary Alternative Education Program (DAEP) placements and were used in this study as a comparison of student behavior before and during the RSDT Project. Dropout reports also are included.

*Question 5: Patterns and analyses of student drug-testing results.* The results of the actual drug testing were reported according to the number of students testing positive for any of the substances in the student drug panel and the number of students testing positive for specific substances in the student drug panel. The results were also reported according to ethnicity and gender, whether or not a student was in special education or gifted and talented programs, and whether or not a student was designated Limited English Proficient.

In this study, drug testing results from Year 2 (August 2006 to May 2007) were compared to results from Year 3 (August 2007 to May 2008) in order to maintain the integrity of the sample. These two time frames are equivalent to two "academic school years" which were compared rather than the actual grant cycle years which do not reflect the academic years nor the same group of students. In this way, the researchers were able to use a consistent sample each year rather than mix different samples within the same year.

*Question 6: Program strengths and areas of concern.* The evaluation methods of the strengths and concerns of the RSDT Project were collected from: (a) reports generated by district personnel, the Public Policy Research Institute at a local university, and the drug-testing vendor; (b) meeting agendas; (c) a survey administered to high school teachers and administrators; and (d) data analysis, direct observations, and interviews conducted by the external evaluators.

## Limitations of the Evaluation

Limitations are inherent in any data collection and analysis techniques. The researchers attempted to address conditions that would bias the research process. Limitations related to data collection processes included the degree of honesty that students, parents, and district personnel provided in various self-reporting assessments. In some instances, participants may have recorded what they consider to be socially acceptable responses rather than their true feelings. A final limitation concerned the growth of the district and any other demographic changes that may have occurred and how those changes might have impacted statistical analyses and the ability to accurately compare results from year to year.

Findings

Question 1: Student Self-Report Results

Student survey results were compared from March 2006 to February 2008 in order to describe the changes in student self-reporting of drug and alcohol use from the beginning of the RSDT Project to the end of the grant cycle. Students’ survey responses indicated a decrease in the use of substances each year of the RSDT Project (see Table 1). From March 2006 to February 2008, students reported a decrease of drug use in the “past month” from 43 % to 39 %. In the same time period, students also reported a decrease in overall drug use “since school began” from 35 % to 20 %.

Questions 2 and 3: Parent, School Staff, and Community Attitudes and Perceptions

The following data were gathered at community meetings and through a school staff survey and were analyzed qualitatively and quantitatively by the researchers.

*Parent and community member responses.* During the first year of the RSDT Project, the data collected at the informational meetings was analyzed by the researchers and indicated that the adult participants overall had concerns about student drug use, believed that all students should be tested, and felt that parents needed to be more involved in the fight against drug use and abuse. Participants completed two surveys, and some participated in a focus group. The results of the parent survey at the end of the RSDT Project indicated that the majority parents agreed that (a) they were informed about the RSDT Project, (b) students understood the consequences of a positive test result, (c) the consequences were fair and adequate, (d) drug testing is a deterrent to drug use, and (e) random student drug testing should continue in the district. Participants were also asked to rank order the programs sponsored by the SDFS Office, and the RSDT Project was ranked number one.

The focus group responses indicated that students and parents learned about the RSDT Project from a variety of sources including meetings, classrooms, publications, the district Web site, and peers. Comments about continuing RSDT without grant funds supported the continuation of the Project.

*Teacher and administrator responses.* In May 2008, 1,935 high school teachers and administrators were emailed a 10-item survey to complete on the RSDT Project, and 465 responded with a response rate of 24 %. One hundred thirty-nine participants (30 %) rated themselves as “involved directly in random student drug testing,” and 326 (70 %) participants described themselves as “not involved directly in random student drug testing.” Participants responded to ten items on a Likert scale including “strongly agree,” “agree,” “disagree,” “strongly disagree,” and “no reply.” In addition, respondents had the opportunity to make additional comments at the end of the survey. In general, teacher and administrator participants agreed that (a) students had adequate information about the RSDT Project, (b) students were treated respectfully during the drug-testing process, (c) student information was held in confidence, (d) drug testing is a deterrent to drug use, and (e) the RSDT Project should continue.

Overall, teachers and administrators had a positive perception of the RSDT Project. Comments included: “I thought the program ran very smoothly.” “I have heard students make positive choices in life with direct association to the possibility of being chosen as a candidate for drug testing.” Some teacher participants indicated that they did not know much about the RSDT Project and would like to have had some training. Others felt that it gave them an opportunity to talk to students about drug use. For example: “I’ve talked with my athletes about this tactic [using drug testing as a way to say ‘no’ to peer pressure], and they say it does indeed work.” “I am glad that I knew enough about the program that I could emphatically tell her [a student who didn’t believe the testing was random] that it was random.”

Question 4: Patterns and Analyses of PEIMS Reports, DAEP Placements, and Dropout Rates

Data collected from the PEIMS were aggregated for comparative and inferential purposes. The number of students referred to a Discipline Alternative Education Placement (DAEP) for drug or alcohol use decreased from the first testing pool in August 2006 to the last testing pool in May 2008 from 604 students to 576 students. Dropout rates increased during the same time period from .9 % to 1.1 % of the overall high school population.

Table 1

Change in Drug Use as Reported by Students (2006 – 2008)

Year	N	Past Month	%	Since School Began	%
2007-2008	2,690	1,044	39 %	543	20 %
2006-2007	2,772	1,146	41 %	890	32 %
2005-2006	2,649	1,130	43 %	920	35 %

Source: *The School Survey of Drug and Alcohol Use*, CFISD 2006, 2007, and 2008.

Question 5: Patterns and Analyses of Student Drug-Testing Results

Drug-testing results for Year 2 (August 2006 to May 2007) of the RSDT Project and for Year 3 (August 2007 to May 2008) indicated a decrease in the percentage of students testing positive for illegal substances (see Table 2). The pool of participants increased from Year 2 to Year 3. Overall, fewer than 5 % of the students in the RSDT testing pool tested positive for alcohol and other drug use indicating program success. The United States DOE grant administrators established a 5 % minimum reduction standard measurement to define the success of all RSDT program grantees. This measurement included all students in the targeted student population testing positive. The number of students in the RSDT pool increased steadily throughout the grant program from 14,442 to 16,047. While the increase in student participation may be due in part to the increase in school district population, the RSDT Project did not appear to deter students from participating in school-sponsored, extracurricular activities.

Table 2  
*Change in Students Testing Positive for Any Substance: Year 2 and Year 3*

Year	N	Positives	%
2007-2008	16,047	332	2.1
2006-2007	14,442	312	2.2

Source: Drug Testing Vendor Annual Report, 2007 and 2008.

Question 6: Project Strengths and Challenge Areas

**Strengths.** The district completed a successful RSDT Project with students testing positive for alcohol and other drugs below 5 % of the RSDT pool. The district found that the number of students participating in extracurricular activities increased steadily throughout the Project. Many opportunities were available for stakeholders to access information about RSDT, to provide feedback regarding the impact of RSDT, and to voice concerns about RSDT. In addition, educational programs were available to stakeholders throughout the grant cycles, culminating with a regional conference entitled *The Future of RSDT*. Additionally, the number of referrals to the DAEP decreased during the grant cycle. Overall, district personnel, students, parents, and community members reported that they perceived RSDT Project as a successful student drug use deterrent.

**Challenge areas.** While the strengths of the RSDT Program are impressive, several challenge areas were noted. One of the most significant challenges in RSDT is protecting student instructional time. Parents and teachers do not want students out of class during instruction for almost any reason. Districts must work diligently to insure that RSDT minimizes disruptions from academics. Another

challenge is supporting parents as they decide what action to take once a student has a positive test result. Students and parents should be encouraged to make an appointment for a drug assessment with a Licensed Chemical Dependency Counselor when contact is made by district personnel concerning a positive test result. On another note, according to the results of the teacher and administrator survey emailed in May, some participants felt that they did not have the information necessary to discuss drug use and drug testing with students. Having each high school dedicate staff development time at the beginning of the school year to educate all staff members about random student drug testing, resources available in the community, and basic drug information to share with students may strengthen the overall effects of a RSDT Project.

Discussion  
Student Self-Reporting

The data from the self-reporting survey could support the strategy of using RSDT to decrease drug use among high school students. However, self-report surveys should always be interpreted cautiously due to the evaluators’ inability to know whether or not some participants chose not to respond, therefore creating bias (Tanur, 1994). Also, other variables may account for behavior changes among the sample population.

Drug and alcohol use among teens will continue to be a concern for students, parents, school staff, and the community. Clearly, the use of alcohol is a great concern to the school district and community specifically because of the large percentages of students, particularly older students, reporting alcohol use recently or in the past. In 2008, 12<sup>th</sup> grade students reported that 42.8 % of them had used alcohol in the “past month.” There are a number of interventions and programs that address student use of alcohol, and districts may want to incorporate these programs in the overall budget for school safety.

Perceptions of Parents, School Staff, and Community

Data were gathered through interviews, focus groups, and survey responses during the course of staff meetings and advisory board meetings, through a teacher/administrator email survey, and at a culminating conference. The district extended many opportunities to all stakeholders to be involved in, to be fully vested in, and to be informed completely about RSDT through these various activities. The commitment to the Project is exemplified in the time and energy that was put forth in the meetings and programs offered. The initial energy and effort of informing all stakeholders about RSDT may have been a direct influence of the success of the Project.

DAEP Placements and Dropout Rates

It should be noted that the district always honors the DAEP Placements of students moving into the district from other districts in the state. Therefore, some reported drug offenses may have occurred in other school districts, but were reported as DAEP placements in this district. In addition, some of the numbers were duplicated as a result of multiple placements during one academic year. Student dropout data indicated that there was an increase in high school student dropout rates overall in the district. One of the reasons for this increase



was a change in the definition of dropout and reporting of dropout by the state's education agency.

## Student Drug Testing Results

All grade levels with the exception of 9<sup>th</sup> grade reduced the number of positives reported during drug testing. Younger students appear to be more at risk for taking chances with illegal substances, being influenced by peers in a negative way, and not following the rules and suggestions of authority figures than their older peers. Positive results of drug testing of the at-risk population of the pool decreased for grades 10 and 11, but increased for grades 9 and 12. Ninth grade at-risk students may have additional reasons for using illegal substances such as not having a positive peer group with which to associate, anxiety about the rigor of high school work, and not having the resources to be involved in extracurricular activities. Twelfth graders who are at risk may feel uncertain about the future, have feelings of depression about what to do after high school, and feel that they are now adults and can engage in the behaviors they desire.

Positive drug-testing results of female participants decreased while they increased for male participants. These results could portray a desire on the part of female high school students to resist negative consequences, to be part of the social groups associated with extracurricular activities, or to listen to the suggestions of coaches and authority figures more readily than their male counterparts. Positive drug-testing results of White, African American, and Asian participants decreased, and positive results of Hispanic participants increased. The Hispanic population has been the fastest growing ethnic group in the district, which may account in part for the increase in positive results in this population.

## Implications and Recommendations

The RSDT Project in this district impacted many students, parents, school staff, and community members. Project personnel, results of students testing positive and the student perception survey, data collection at the informational meetings for parents, observation of the drug-testing protocol, teacher and administrator surveys, and anecdotal notes have supported the implementation of the RSDT Project. In other statewide district studies utilizing RSDT as a deterrent, a reduction in drug use and availability through anonymous self-reporting student survey data was also reported (Rose, 2009). The US DOE grant performance report (ED524B) "gives information on the extent to which the expected outcomes and performance measures were achieved, with highlights of the projects goals, the contributions that the project has made to research, knowledge, practice, and/or policy" (Rose, 2009, p. 91). Further research might include longitudinal studies that track the impact over time of RSDT on students who tested positive during high school. It would be important to gather data relevant to whether or not these students continued in counseling, graduated from high school, applied to colleges or universities, and/or became employed.

The following recommendations are offered to other school districts to support a RSDT Project" (a) obtain school employees, parental, and community support through educational and informational meetings; (b) conduct follow-up training at the campus and district level to ensure effective and respectful collection of student samples;

(c) collect data that will add to the understanding of the effectiveness of random student drug testing in schools; (d) administer a research-based survey to monitor the self-reports of students regarding their own and their peers' drug use; (e) continue to communicate as needed with parents new to the Project or the district and any other interested parents or community members; (f) consider collecting qualitative data to determine factors that influence student choices regarding drug use; (g) administer a districtwide survey of high school teachers and administrators regarding their perceptions of the effectiveness of the RSDT Project; and (h) create and maintain a task force to discuss the maintenance of the RSDT Project.

## Conclusion

There is much controversy over the use of RSDT among legislators, school administrators, parents, mental health care providers, and community leaders. The results of this study and similar research in other districts may give educators more information about how to design a program that deters and supports students and their academic advancement (Rose, 2009). As a nation Americans agree that students have the right to attend school free from the influences of drugs and violence, but administrators have few tools to ensure this reality. The district received local, statewide, and national attention as a leader in drug prevention among adolescents through RSDT.

The implications of this and other similar studies in education are considerable (Rose, 2009). Faced with the growing problems of increased drug use and the need for students to perform at their optimum level academically while the increased level of drug-related incidents continue to create safety concerns, RSDT has the ability to deter drug use and intervene with students currently using. The interruption of instructional time is minimal, and the benefits are reported in the data as successful.

---

## References

- Board of Education of Independent School District No. 92 of Potawatamie County et al. v. Earls et. al. 536 U.S. 822 (2002).
- Brady, L. (2007). *Student perceptions of the effectiveness of a student random student drug testing program in one New Jersey high school*. (Doctoral dissertation, Seton Hall University, Educational Administration and Supervision). Retrieved from <http://library.shsu.edu/>
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Dillman, D. A. (2007). *Mail and Internet surveys: The tailored design method* (2<sup>nd</sup> Ed.). Hoboken, NJ: John Wiley & Sons.
- DuPont, R., & Brady, L. (2005). *Drug testing in schools: Guidelines for effective use*. Center City, MD: Hazelden.
- DuPont, R., Campbell, T., & Mazza, J. (2002). *Report of a preliminary study: Elements of a successful school-based student drug testing program*. Institute for Behavior and Health, Inc. U.S. Department of Education Order No. ED-01-PO-3886. Retrieved from <http://drugtestingsaves.com/SDT%20DUPONT%20STUDY.pdf>
- DuPont, R., & Graves, H. (2005). *Smarter student drug testing*. Rockville, MD: Institute for Behavior and Health. Retrieved from <http://www.ibhinc.org/>

- DuPont, R., Griffin, D., Siskin, B., Shiraki, S., & Katze, E. (1995). Random drug tests at work: The probability of identifying frequent and infrequent users of illicit drugs. *Journal of Addictive Diseases*, 1-17. doi: 10.1300/J069v14n03\_01
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction*. White Plains, NY: Longman Publishers.
- Goldberg, L., Elliott, D., MacKinnon, D., Moe, E., Kuehl, K., Nohre, L., & Lockwood, C. (2003). Drug testing athletes to prevent substance abuse: Background and pilot study results of the SATURN study. *Journal of Adolescent Health* 2003; 32:1, 16-25. doi: 10.1016/S1054-139X(02)00444-5
- Goldberg, L., Elliott D., Moe, E., Kuehl, K., & Clarke, G. (1999). Acceptability and potential deterrent effects of drug testing, *Medicine and Science in Sports and Exercise*, 31(5), 122-23.
- National Center on Addiction and Substance Abuse, Columbia University. (2007). *National survey of American attitudes on substance abuse XII: Teens and parents*. Retrieved from <http://zzwww.casa-columbia.org/ProductSearch.aspx?CATID=121920079233524>
- National Center on Addiction and Substance Abuse; Columbia University. (2005). *National survey on American attitudes on substance abuse*. Retrieved from <http://zzwww.casacolumbia.org/>
- Office of National Drug Control Policy. (2008). *National drug control strategy 2008 annual report* (NCJ Publication No. 221371). Retrieved from <http://www.ncjrs.gov/pdffiles1/ondcp/221371.pdf>
- Office of National Drug Control Policy. (2002). *What you need to know about testing in schools* (NCJ Publications No 195522). Retrieved from [http://www.ncjrs.gov/ondcppubs/publications/pdf/drug\\_testing.pdf](http://www.ncjrs.gov/ondcppubs/publications/pdf/drug_testing.pdf)
- Office of National Drug Control Strategy. (2008). *What works: Effective public health responses to drug use*. Retrieved from [www.whitehousedrugpolicy.gov](http://www.whitehousedrugpolicy.gov)
- Public Policy Research Institute. (2006). *The Texas school survey of drug and alcohol use*. College Station: Texas A & M University.
- Rose, N. (2009). *The relationship between random student drug testing and student drug use in Texas public schools*. (Doctoral dissertation, International University for Graduate Studies, Behavioral Health).
- Russell, B., Jennings B., & Classey, S. (2005). Adolescent attitudes toward random drug testing in schools. *Journal of Drug Education*, 35(3), 167-184. doi: 10.2190/8GEA-60JH-5PPV-Q9WL
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications, Inc.
- Tanur, J. (1994). The trustworthiness of survey research. *Chronicle of Higher Education*, 40(38), 3-5.
- U.S. Department of Health and Human Services. (1988). *Mandatory guidelines for federal workplace drug testing programs*. Retrieved from [www.nsc.org/get\\_involved/.../Handbook%20NSChistoryof-CAOD.pdf](http://www.nsc.org/get_involved/.../Handbook%20NSChistoryof-CAOD.pdf)
- United States Olympic Committee. (1996). *USOC, Drug Control Administration*. Retrieved from <http://www.teamusa.org/search?q=drug+testing&x=7&y=6>

---

## Authors

**Judith A. Nelson**, Ed.D., is an assistant professor at Sam Houston State University in the Educational Leadership and Counseling Department. She is a licensed professional counselor, an approved supervisor for licensed professional counselor interns, a licensed marriage and family therapist, and a certified school counselor. Dr. Nelson is the past president of the Texas Counseling Association. Her research interests include drug and alcohol problems, adolescents and families, school counseling, and marriage and family therapy. Dr. Nelson worked in public schools for more than 25 years and in discipline alternative schools for 10 years.

**Nancy L. Rose**, Ed.D., has worked 30 years in the private and public sector as a counselor, administrator, researcher, and fund raiser with her primary interest in drug and alcohol recovery and intervention. She has created community workshops and materials that are used to educate students kindergarten through college age, adults, and court appointed clients on the dangers of involvement, and the steps to recovery. Her passion is to promote therapeutic changes which influence the quality of life for families involved in the disease of drug and alcohol addiction.

**Danielle Lutz**, Ed.D., is the Executive Director of Palmer Drug Abuse Program. Dr. Danielle Lutz was an employee of public school systems for 24 years and worked as a teacher, middle school assistant principal, and a grant administrator. She serves on various nonprofit and professional boards and presents workshops on a variety of school-based and nonprofit business topics at the local, state, and national levels. She has been an invited speaker for the United Way, Region IV and XIII Educational Service Centers, Texas Education Agency, Grant-writers' Association, American Association of Grant Professionals, and the White House Office of National Drug Control Policy. Dr. Lutz has been the project director for over 16 million dollars in grant initiatives and been involved in over 50 million dollars of grant projects.

---